PRACTICAL EXERCISE
PRINTOUT ANALYSIS AN/TYC-39(A)

INTRODUCTION:

This practical exercise will provide you with the time to practice interpretation of received service printouts and determine corrective action in the operation of the MS. Your learning objective for this lesson is to correctly interpret service printouts, determine corrective action in three of four printouts within 30 minutes and to correctly answer 7 of 10 questions within 30 minutes.

ITEMS YOU WILL NEED FOR THIS LESSON:

1. Operational AN/TYC-39A.

2. TM 11-5805-790-12-3.

3. TM 11-5805-790-12-4.

4. TM 11-5805-790-12-5.

THE LESSON STRATEGY:

This practical exercise directs you in your practice of interpreting received operational and traffic printouts and determining necessary action in the operation of the AN/TYC-39(A). The primary aid you will use is TM 11-5803-790-12-4.

APPLICATION:

1. In Part One, perform printout analysis in the AN/TYC-39A within 30 minutes using TM 11-5805-790-12-3 through 12-5.

2. Your instructor will initial your PE during your performance.

3. In Part Two, answer questions by filing in the blanks or circling the answer.

4. When you have completed Part Two, ask your instructor to grade it for you.

5. If it is not clear what you are required to do, ask your instructor for clarification.

PART ONE:

Circle the proper answer or fill in the blank as you perform printout interpretation in the AN/TYC-39A. Have instructor initial upon completion of each printout.

1. Printout Type: Traffic or Operational

   Printout Reference Paragraph _____

   Supervisor or Traffic Service Action Required? YES/NO

   INSTRUCTOR'S INITIALS_____

2. Printout Type: Traffic or Operational

   Printout Reference Paragraph _____

   Supervisor or Traffic Service Action Required? YES/NO

   INSTRUCTOR'S INITIALS_____

3. Printout Type: Traffic or Operational

   Printout Reference Paragraph _____

   Supervisor or Traffic Service Action Required? YES/NO

   INSTRUCTOR'S INITIALS_____

4. Printout Type: Traffic or Operational

   Printout Reference Paragraph _____

   Supervisor or Traffic Service Action Required? YES/NO

   INSTRUCTOR'S INITIALS_____

PART TWO:

1. You have received a floppy disk drive printout with the reason code DIRE. What does DIRE stand for?

_____
_____

2. Why would a system failed printout occur?

_____
_____
_____
_____
_____
_____

3. You have received a message error/discrepancy traffic printout with the mnemonic TSF. What is the program description and program response for this code?

_____
_____
_____

4. You are given a phone number for one of your circuit switched data terminals. What data base (DABA) chapter will give you the associated RI?

_____

5. What is the standard information printed on all data base (DABA) printouts?

_____
_____
_____

6. Explain why you would receive a traffic printout referencing queue and disk backlog: "SYS UPPER".

_____
_____
_____
_____

Use the following printouts for questions 7 through 10:

```
================================================================
0969 099 NRI DOCCCZYVW RUTCCST0002 0990959   40000307SL075/0043
0969 099 NRI 40000307 L075 ,RUTCLAP=S

NNNN

OATUZYVW RUTCCSD0043 0990959-UUUU--RUTCCSA.
ZNR UUUUU
BT
UNCLAS SVC RUTCCST0002 0990959
INVALID ROUTING
MESSAGE NOT DELIVERED TO RI(S) LISTED FOR SPECIFIED REASON:
MESSAGE SECURITY INCOMPATIBLE WITH DELIVERY RI - REPROTECT FOR:
RUTCLAP
#0043
================================================================
```

7. Are these printouts traffic or operational?

   _____

8. What printout reference paragraphs would you use?

   _____

9. What are the reasons for the printouts?

   _____
   _____

10. What did the switch do to the original message?

    _____
    _____

SUMMARY:

You have now demonstrated your knowledge on the AN/TYC-39(A) message switch. You have also demonstrated your ability to perform printout analysis in the operation of the MS. With this knowledge and continued practice, your ability will continue to increase, making you a better operator or supervisor of the AN/TYC-39(A) message switch.

SUPERVISOR POSITION OPERATIONS

INTRODUCTION:

This practical exercise allows you to check and reinforce your understanding of the supervisory position and commands. Your objective is to correctly perform 8 of 10 supervisory procedures within 1 hour and correctly answer at least 14 of 20 questions within 1 hours.

ITEMS YOU WILL NEED FOR THIS EXERCISE:

1. Operational AN/TYC-39A with terminals.

2. TM 11-5805-790-12-3.

3. TM 11-5805-790-12-4.

4. TM 11-5805-790-12-5.

THE LESSON STRATEGY:

1. You will have 1 hour to complete part one in the AN/TYC-39A and 1 hour to complete part two written portion of this practical exercise.

2. When you have completed this exercise, turn it into your instructor.

3. If there are no questions you may begin.

APPLICATION:

1. Using TMs 11-5805-790-12-3, 4, 5 perform 10 supervisory procedures in the AN/TYC-39A.

2. Using TMs 11-5805-790-12-3, 4, 5 answer the 20 questions on the practical exercise provided.

3. When you have completed the exercise have your instructor grade it for you.

4. If it is not clear what you are required to do, ask your instructor for clarification.

PART ONE:

Perform the following steps in the AN/TYC-39A.

1. Observe the channel status area of the Supervisory VDT. What real lines are assigned in the data base?

Line numbers: _____

2. Perform the following procedures:

a. Print message switch to circuit switch display.

b. Send message switch terminal display.

3. Perform the DABA SWIT command.

4. Enter one DABA command to obtain all the line classmarks and router information for line 08.

5. Using information on the printout from the previous step, send a check message to line 8.

6. Perform the following channel loopback tests on line 6 and indicate whether each test passed or failed:

LTU: PASS or FAIL

MODEM: PASS or FAIL

REMOTE: PASS or FAIL

7. Perform configuration commands as directed by your instructor.

_____
_____
_____
_____

8. Perform a device self-check on an LPU.

9. Perform the status command that will give you a printout of configuration status information.

10. Perform the command that will give you the next ASN to be assigned.

PART TWO:

Answer the following questions by filling in the blank or circling the best answer.

1. What rows on the supervisory VDT contain the individual channel status?

   a. Rows 1 and 2.

   b. Rows 2 and 3.

   c. Rows 4 and 5.

   d. Rows 21 through 25.

2. How can you stop the system alarm "RRI"?

   s. Press the ACK key.

   b. Press the MODE key.

   c. Enter NCRR A.

   d. Enter RTOV.

3. What command should you use if you cannot guarantee message accountability?

   a. ABCY A.

   b. ABCY D.

   c. SACK.

   d. &CAN.

4. Which command allows you to put a channel in-service by channel number?

   a. CCSR.

   b. LCSR.

   c. CISR.

   d. LISR.

5. Which of the following commands will receive a NAK?

   a. STAT RIC 046.

   b. RCSN RUTCAKE I.

   c. LOSR 046.

   d. CMSG RUTCAKE.

6. Which command makes a device available for on-line use?

   a. CONN.

   b. DCON.

   c. YAVL.

   d. YIGN.

7. What would be the command line to loopback channel 20 at the modem?

   a. LOOP CHN 020 MODEM.

   b. ECMD LPBM MODEM 020.

   c. CHEK CHN 020 MODEM.

   d. LPBK CHN 020 MODEM.

8. Where do you find the results of the command performed in question 7?

   a. SUP or COM LPU.

   b. SUP or COM VDT.

   c. OFF-LINE MAINT VDT.

   d. A & B.

9. Which command would give you complete line classmarks and routing information on a specific channel?

a. DABA CHN 007 RI.

b. DABA LINE 07 A.

c. DABA RI RUTCAKE.

d. DABA XREF LINE.

10. While in the display mode what key is used to return to the SYS-SUM mode?

a. DISM.

b. NO.

c. ACK.

d. MODE.

11. In the channel status area, what indicates that a channel has passed a loopback test?

a. +*.

b. LA.

c. LP.

d. B & C.

12. What command gives the number of messages in queue for routers?

a. STAT MBC.

b. STAT MBR.

c. DABA RI ALL.

d. DABA ALL.

13. How are RIs in each node listed on the graphic display?

_____
_____
_____
_____
_____
_____

14. When you press the supervisory function ACKT key, what happens on the VDT screen?

_____
_____
_____

15. What reports does CANP cancel?

_____
_____
_____

16. Which command would initialize an SDU?

_____
_____

17. What devices are required to initialize an SDU?

_____
_____
_____

18. Which command is used for copying a floppy disk?

_____
_____
_____

19. What command allows you to operate on-line with one control and two history SDUs.

_____

20. List and describe the operator directives that a logged-on administrator can perform.

_____
_____
_____

SUMMARY:

You have just demonstrated your ability to identify the use and format of the AN/TYC-39A supervisory position. With this knowledge and continued practice, your ability will continue to increase which will make you a better operator/supervisor of the message switch AN/TYC-39(A).

MESSAGE DIVERSION

INTRODUCTION:

This practical exercise will provide you with the time to practice commands associated with message diversion procedures as they are applied in the message switch AN/TYC-39(A). Your learning objective for this lesson is to practice implementing and removing message diversions until you are able to correctly perform 14 of 20 message diversion procedures within 60 minutes and to correctly answer 7 of 10 questions within 30 minutes.

ITEMS YOU WILL NEED FOR THIS LESSON:

1. Operational AN/TYC-39(A).

2. TM 11-5803-790-12-2.

3. TM 11-5803-790-12-3.

4. TM 11-5805-790-12-4.

THE LESSON STRATEGY:

Part one of this practical exercise directs you in your practice of performing message diversion procedures. Part two directs you to answer 10 questions by filling in the blank or circling the best answer. The primary aid you will use is TM 11-5805-790-12-3.

APPLICATION:

1. In Part One, perform message diversion procedures within 1 hour using TM 11-5805-790-12-2 and -3 and figure 1 or 2.

2. Your instructor will evaluate your printouts and initial your PE during your performance.

3. In Part Two, answer questions by filing in the blanks or circling the best answer.

4. When you have completed Part Two, ask your instructor to grade it for you.

5. If it is not clear what you are required to do, ask your instructor for clarification.

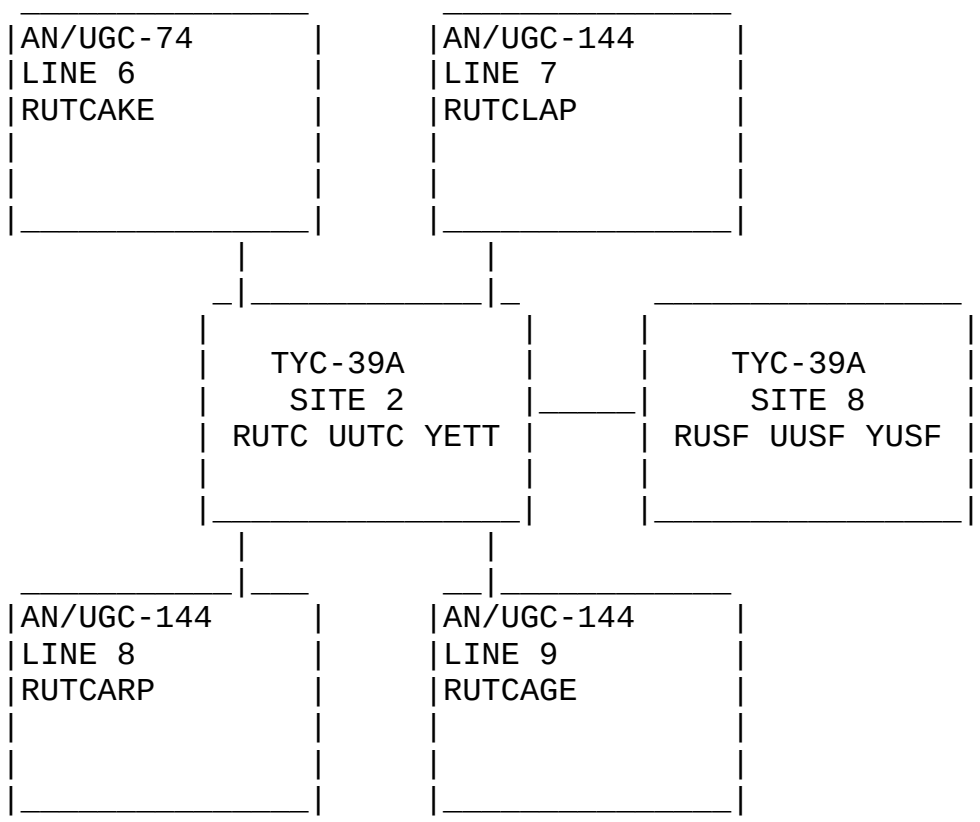
AN/UGC-74
LINE 6
RUTCAKE
AN/UGC-144
LINE 7
RUTCLAP
TYC-39A
SITE 2
RUTC UUTC YETT
TYC-39A
SITE 8
RUSF UUSF YUSF
AN/UGC-144
LINE 8
RUTCARP
AN/UGC-144
LINE 9
RUTCAGE

FIGURE 1

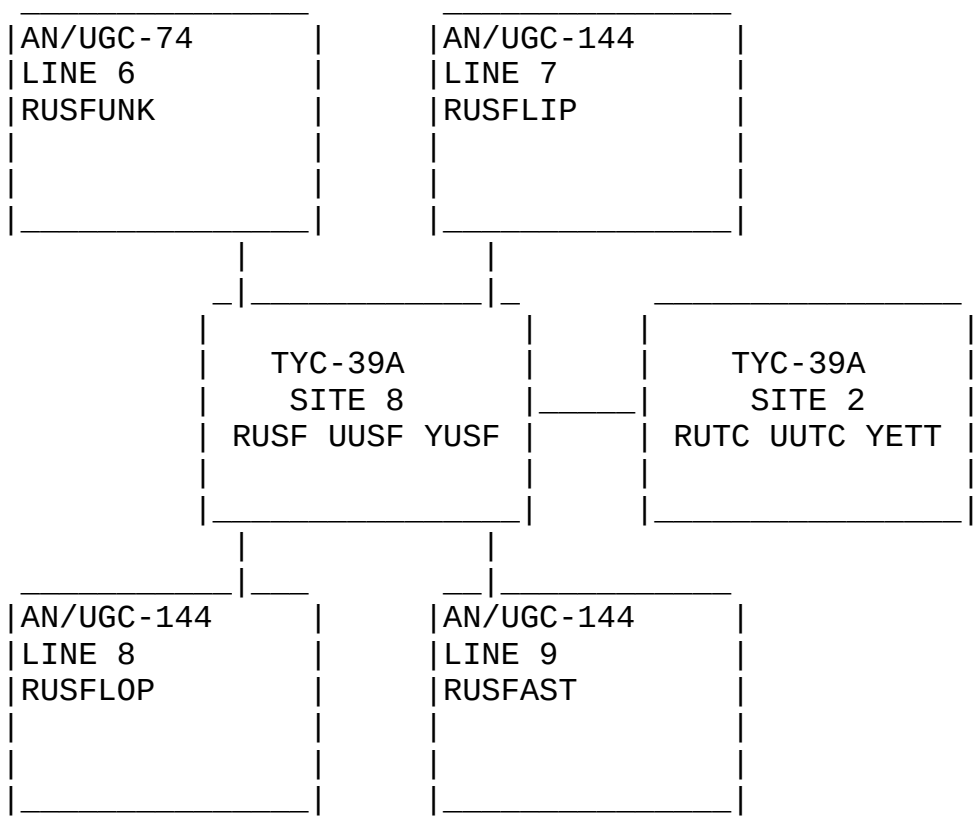
AN/UGC-74
LINE 6
RUSFUNK
AN/UGC-144
LINE 7
RUSFLIP
TYC-39A
SITE 8
RUSF UUSF YUSF
TYC-39A
SITE 2
RUTC UUTC YETT
AN/UGC-144
LINE 8
RUSFLOP
AN/UGC-144
LINE 9
RUSFAST

FIGURE 2

PART ONE:

Have instructor perform TGEN commands to add reintroduction information to database. Using TM 11-5805-790-12-3, perform the following message diversion procedures using Figure 1 or 2 as directed by your instructor.

Step 1. Write and perform the status command that will give you information about all operator-initiated diversions in effect. If there are no diversions in effect continue with step 2. If any diversions are in effect have instructor remove them and then continue with step 2.

Command_____

Step 2. Write and perform the command which will allow you to altroute by CHANNEL all messages (all media and precedence) for RUSFUNK (Figure 2) or RUTCAKE (Figure 1) to be altrouted to channel 8.

Command_____

Step 3. Write and perform the command which will allow you to altroute confidential and priority messages from channel 08 to channel 9 by ROUTING INDICATOR.

Command_____

Step 4. Write and perform the command which will allow you to altroute all messages for line 9 by channel to traffic service position of DISTANT message switch.

Command_____

Step 5. Write and perform the command which will show the status of only altroutes.

Command_____

Step 6. Display and print screen that shows all dedicated terminals.

Step 7. Display and print screen that shows message switch to message switch connections.

Step 8. Write and perform the command to discontinue altroute performed in step 2.

Command_____

Step 9. Write and perform the command to discontinue altroute performed in step 3.

Command_____

Step 10. Write and perform the command to discontinue altroute performed in step 4.

Command_____

Step 11. Write and perform the status command that will show only altroute information. There should be no altroutes in effect. If there are, remove them using the proper commands.

Command_____

Step 12. Write and perform the reintroduction command that will activate reintroduction for channel 8.

Command_____

Step 13. At the traffic service position send a message to router on channel 8. If you have performed previous step properly the message should have been reintroduced (diverted) and should print at your traffic service printer.

Step 14. Write and perform the command to show all diversions in effect.

Command_____

Step 15. Write and perform the command to deactivate reintroduction procedure performed in Step 12.

Command_____

Step 16. Write and perform the command to intercept messages by router and by immediate precedence for channel 6.

Command_____

Step 17. Write and perform a status command that will give information on only intercept diversions in effect.

Command_____

Step 18. Write and perform the command to discontinue intercept diversions that are in effect.

Command_____

Step 19. Write and perform a status command that will give you information about all diversions in effect. If any diversions are still in effect remove them using the proper commands.

Command_____

Step 20. Write and perform the command to activate reintroduction for the entire switch.

Command_____

When all 20 steps are completed, tear off paper from printers, sign, and turn in to instructor for evaluation.

INSTRUCTOR'S INITIAL:_____

PART TWO:

1. What types of messages are not altrouted?

_____
_____
_____

2. If a message is subject to more than one diversion, what is the hierarchy of the diversions?

_____
_____
_____

3. Using the graphic display screens, explain how to identify altroute paths that are in effect.

_____
_____
_____

4. What types of messages are not intercepted?

a. CRITIC messages.

b. High-precedence answer backs.

c. Mode II acknowledgements.

d. All of the above.

5. What status commands will give you altroute information?

a. STAT ALT.

b. STAT MSG.

c. STAT ICA.

d. A & B.

6. When you have alrouting in effect, what on the channel status summary indicates that a channel has some type of message diversion in effect?

a. +.

b. *.

c. %.

d. $.

7. When intercept is in effect, where are messages stored?

a. Storage device unit.

b. On-line processor.

c. Pseudo line 76.

d. Returned to OSRI for storage.

8. What system alarm indicates messages are being delivered to the limbo line?

a. ILI.

b. LIM.

c. LPU.

d. ORB.

9. What system alarm indicates overflow has been initiated?

a. OVT.

b. STL.

c. *TD.

d. WOV.

10. What graphic display screen includes the LIMBO line connections?

a. MS-CS.

b. MS-MS.

c. MS-DIN.

d. MS-TERM.

SUMMARY:

You have now demonstrated your knowledge and ability on message diversion procedures as they are used in the AN/TYC-39(A). With this knowledge and continued practice, your ability will increase and will help make you a better operator/supervisor.

END

MESSAGE TRACE AND RETRIEVAL PROCEDURES

INTRODUCTION:

This practical exercise will provide you with the time to practice commands associated with message trace and retrieval procedures as used in the AN/TYC-39(A). Your learning objective for this lesson is to implement trace and retrieval commands until you are able to correctly enter three of five commands within 30 minutes and to correctly answer 7 of 10 questions.

ITEMS YOU WILL NEED FOR THIS LESSON:

a. Operational AN/TYC-39(A).

b. 2-AN/UGC-144 dedicated terminals.

c. 1-AN/UGC-74 dedicated terminal.

d. TM 11-5805-790-12-2.

e. TM 11-5805-790-12-3.

THE LESSON STRATEGY:

Part one of this practical exercise directs you in your practice of performing message trace and retrieval procedures. Part two requires you to answer 10 questions on trace and retrieval. The primary aid you will use is TM 11-5805-790-12-3.

APPLICATION:

1. In Part One, perform trace and retrieval procedures within 30 minutes using TM 11-5805-790-12-3.

2. Your instructor will evaluate your printouts and initial your PE during your performance.

3. In Part Two, answer questions by filling in the blanks or circling the best answer.

4. When you have completed Part Two, ask your instructor to grade it for you.

5. If it is not clear what you are required to do, ask your instructor for clarification.

PART ONE:

Using TM 11-5805-790-12-3, paragraph 5-24, perform the following procedures associated with message trace and retrieval as directed. If you receive a report that says "Cancel or continue," ask your instructor which to perform.

1. Procedure 1: Retrieve a range of messages by ASN along with trace report with MCB data. Send entire message copies to traffic service position only. Obtain ASNs from instructor:

   ASNs: _____

   COMMAND: _____

2. Procedure 2: Perform trace procedures to determine message deliveries to channel 06 using a specific time period. Obtain time range from instructor.

   TIME RANGE_____

   COMMAND: _____

3. Procedure 3: Initiate TWO trace procedures using originating station routing indicator (OSRI) and range of originating station sequence numbers (OSSNs). Obtain OSRIs and OSSNs from instructor. Since your main objective for this procedure is to CANCEL the 2d trace once the first one has begun, you must use SPEED when inputting all these command lines.

   1st OSRI/OSSNS_____

   2d OSRI/OSSNS_____

   1st TRACE COMMAND:_____

   2d TRACE COMMAND:_____

   COMMAND TO CANCEL TRACE:_____

4. Procedure 4: Retrieve messages on input from channel 6 using a range of channel sequence numbers (CSNs); no trace report; send copies of message headers only to traffic service. Obtain CSNs from instructor.

CSNs_____

RETRIEVE COMMAND_____

5. Procedure 5: Retrieve messages delivered to a channel 7 using a range of time: long report, deliver retrieved messages to traffic service position only. Obtain time range from instructor.

TIME RANGE_____

RETRIEVE COMMAND_____

PART TWO:

1. What do message trace commands allow you to do?

_____
_____
_____
_____

2. Define the AN/TYC-39A retrieval process.

_____
_____
_____
_____

3. Which command cancels a trace?

   a. NTRA.

   b. DTRA.

   c. CANT.

   d. CNAR.

4. What alarm is displayed when the left limit is found for a TRAC/RETR command with OSSN or CSN?

   a. LFT.

   b. LSN.

   c. TRA.

   d. NTR.

5. When using TSH in a retrieval command, what are you choosing?

_____
_____
_____
_____

6. When using TSM in a retrieval command, what are you choosing?

_____
_____
_____
_____

7. If you want to print the trace report with MCB data and printout events, what specification would you choose?

a. ALL

b. N

c. S

d. L

8. What command must be entered to acknowledge the TRA alarm and to terminate the RETR/TRAC command?

a. CONT N.

b. CONT Y

c. NTRA

d. STOP TRA

9. What is the priority of processing if more that one trace request is queued at the same time?

_____
_____
_____
_____

10. A trace report has been printed and has a report trailer field that states: "TRACE MAY BE CONTINUED." What does this mean and what command would you use to search for earlier messages?

_____
_____
_____
_____

SUMMARY:

You have now demonstrated your knowledge on trace and retrieval procedures as they are used in the message switch AN/TYC-39(A). You have also demonstrated your ability to perform trace and retrieval and operate the message switch AN/TYC-39(A). With this knowledge and continued practice, your ability will increase, making you a better operator supervisor.

END